

complete blood records and clinical histories. In eighteen of them pepto-mangan was used save toward the termination of five of them, when Blaud's pills were substituted. In eleven cases Vallet's mass was used, supplemented by Blaud's pills. In twenty-nine cases Blaud's pills were used exclusively. Three cases have no bearing on the subject.

Reconstructive Treatment.	Pepto-Mangan (Gude).	Blaud's Pills.	Vallet's Mass.
Average hemoglobin before treatment, per cent.	20.7	26.5	18.1
Average number of days under treatment	80.7	47.9	69.8
Average gain in hemoglobin during treatment, per cent.	62.3	66.8	66.6

But to bring out the difference between these drugs more vividly eighteen pairs of cases of like type have been tabulated, whose initial hemoglobins absolutely or nearly correspond. One of each pair was treated by Blaud's pills, the other by pepto-mangan. The demonstration is all the more potent in that both drugs were used in their true role as blood regenerators, in conjunction with thymol administered to both alike.

Case, No.	Form of Iron Used.	Hemoglobin Before Treatment.	Days Under Treatment.	Total Gain Hemoglobin.
1.	Pepto-mangan	33	100	68
56.	Blaud's pills..	33	56	70
3.	Pepto-mangan	25	71	78
52.	Blaud's pills..	25	36	75
4.	Pepto-mangan	28	97	72
50.	Blaud's pills..	27	36	75
6.	Pepto-mangan	22	101	48
25.	Blaud's pills..	22	43	78
7.	Pepto-mangan	10	63	93
28.	Blaud's pills..	11	71	90
8.	Pepto-mangan	34	101	44
46.	Blaud's pills..	35	36	69
9.	Pepto-mangan	20	99	83
43.	Blaud's pills..	20	50	81
10.	Pepto-mangan	20	92	84
51.	Blaud's pills..	20	50	63
11.	Pepto-mangan	32	95	48
47.	Blaud's pills..	32	36	70
12.	Pepto-mangan	27	80	3
53.	Blaud's pills..	25	50	84
13.	Pepto-mangan	14	94	95
23.	Blaud's pills..	14	50	66
14.	Pepto-mangan	16	93	85
45.	Blaud's pills..	16	57	46
15.	Pepto-mangan	11	84	99
22.	Blaud's pills..	12	71	92
16.	Pepto-mangan	20	92	70
60.	Blaud's pills..	19	28	71
17.	Pepto-mangan	9	36	6
21.	Blaud's pills..	13	71	89
18.	Pepto-mangan	16	98	66
59.	Blaud's pills..	18	53	57
19.	Pepto-mangan	28	49	75
42.	Blaud's pills..	31	57	3
33.	Pepto-mangan	9	8	6
20.	Blaud's pills..	22	27	48

That is to say, of eighteen pairs of almost identical cases, the initial average of hemoglobin percentage in the cases treated by Blaud's pills was 21.9; in those treated by pepto-mangan (Gude), 20.7; the average number of days under treatment was 48.7 in the cases treated by Blaud's pills; in those treated by pepto-mangan (Gude), 80.7; the average gain in hemoglobin under Blaud's pills was 68.1 per cent; under pepto-mangan (Gude), 62.3 per cent.

We tried to use a variety of iron preparations and were offered the pepto-manganates made by this company. We had no idea that this preparation differed essentially from any other pepto-manganate of iron, and it certainly may not, but had we considered

the pepto-manganates of superior value as blood regenerators we would have said so. As it is, we have said the contrary and wrote this company to that effect at the time we became convinced of it.

This commission does not wish to be understood to consider the use of reconstructive treatment as a necessity in the anemia of uncinariasis. Such an idea is all the more absurd in view of the fact that in the 12,000 cases treated under its direction since June 1, 1905, comparatively little reconstructive treatment has been used, many cases receiving none at all. As our experience with this disease widens, our opinion is strengthened that anthelmintic treatment is not only curative, but promptly so, in the vast majority of cases, iron or no iron. Thanking you in advance for the use of your columns,

We are, very truly yours,
BAILEY K. ASHFORD,
W. W. KING,
PEDRO GUTIERREZ YGARAVIDEZ,
Members of the Commission.

Journal A. M. A., Oct. 7, 1905.

THE MEDICAL RECORD AND THE PROPAGANDA AGAINST NOSTRUMS.

A little while ago the New York *Medical Record* contained a two-page advertisement of the Etna Chemical Company, which evidently was intended to counteract the effect of the report of the Council on Pharmacy and Chemistry which showed phenalgin to be a simple acetanilid mixture. Still more recently the same journal contained another two-page advertisement, one of which was occupied with a cartoon intended to cast ridicule on the efforts being made against the nostrum evil. Since these advertisements appeared in a scientific medical journal and a journal that is supposed to represent intelligent physicians, one might charitably suppose that they were admitted through lack of supervision. Such does not appear to be the case, however.

Under date of September 8th, the editor of the *Journal of the American Medical Association* sent the following letter to the *Medical Record*:

To the Editor: Your issue for last week, September 2d, contains a two-page advertisement of the Etna Chemical Company relating to their preparation, phenalgin. One page is entirely taken up with a cartoon evidently intended to deride the *Journal of the American Medical Association*, the Council on Pharmacy and Chemistry of the American Medical Association, and the propaganda against nostrums. The other page contains what is presumed to be an answer to the official announcement of the Committee on Chemistry regarding its investigation into certain preparations offered to the profession and to the public, especially as it is related to phenalgin. Permit me to quote from the advertisement as it appears on advertising page 21 of the *Record*: "Recently certain ill-advised persons have attempted to confuse Phenalgin with patent and quack Nostrums, and have so far succeeded that the influence of the *Journal of the American Medical Association* has been brought to bear against our legitimate and ethical business."

"We believe that Commercialism of the rankest kind has dominated this absurd crusade against us. These people may call Phenalgin a mixture, or a compound, or anything that pleases them; it does not in the least change the fact that Phenalgin is just what we have always said it to be."

"We know that doctors who are practicing medicine and prescribing Phenalgin will continue to do so regardless of the reports of alleged analytical chemists whose experience in the sick room is an atom of a myth compared with that of those who are continually using our product."

My object in writing you is to briefly state certain facts solely for the information of your readers.

What the Council on Pharmacy and Chemistry of the American Medical Association is and what its functions are are well known to your readers. While the council has been outlining plans for work, making investigation into various products, it has published but one official report; this was on six preparations, viz.: ammonol, antikamnia, Koehler's headache powders, orangeine, phenalgin and salacatin (sal-codeia-Bell). The report on phenalgin was as follows:

"According to the analysis of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid.	Sodium bicarb.	Ammonium carb.
57	29	10

"Certain packages of phenalgin were purchased which on analysis did not show ammonium carbonate."

The committee signing the report¹ and vouching for its truthfulness consisted of:

J. H. Long, M. S., Sc. D., professor of chemistry in the Northwestern University Medical School and director of its chemical laboratories, the author of "A Text-Book of Physiological Chemistry," and other works on chemistry, and, last year, president of the American Chemical Society;

W. A. Puckner, Ph. G., professor of chemistry in the School of Pharmacy of the University of Illinois, and a contributor of scientific articles to chemical journals;

S. P. Sadtler, Ph. D., professor of chemistry in the Philadelphia College of Pharmacy, author of "A Text-Book on Chemistry," associate editor of the U. S. Dispensatory, and a member of the Committee on Revision of the U. S. Pharmacopeia;

Julius Stieglitz, Ph. D., professor of chemistry in the University of Chicago, a man of wide repute as a chemist, and the author of several works on chemistry; and

H. W. Wiley, M. D., Ph. D., chief of the Bureau of Chemistry of the Department of Agriculture, Washington, D. C.

Besides the above, other chemists assisted in the work, and the following made analyses of phenalgin:

H. M. Gordin, Ph. D. (Berne), professor of chemistry in the School of Pharmacy of the Northwestern University, who has done a large amount of original work, as his contributions to chemical literature will show; and

Max D. Slimmer, B. S. M. A. (University of Chicago), Ph. D. (Berlin), who has several fellowships in chemistry in the University of Chicago, who has done considerable original work in chemistry, and who is recognized as an honorable and capable analytical and consulting chemist.

These are the gentlemen referred to in the advertisement in the *Medical Record* as "alleged analytical chemists."

In a former advertisement the Etna Chemical Company says: "We protest against the association of Phenalgin in that publication" (meaning the *Journal of the American Medical Association*) "with patent medicines and nostrums as an uncalled-for insult to a reputable American Manufacturing Chemical Industry."

In this statement, the Etna Chemical Company gives physicians the right to ask whether it is "reputable" to inveigle them into prescribing a simple acetanilid mixture under the supposition that it is a definite synthetic chemical substance and to charge a dollar an ounce for a preparation the ingredients of which cost less than five cents.

There is, however, one assertion made in the advertisement which, I think, is well taken. The preparation is certainly not now a "secret remedy," for the Council on Pharmacy and Chemistry has cleared up all doubts as to the composition of "ammoniated-phenylacetamide."

Since you did not see fit to publish, or mention, the report referred to above, but have allowed your advertising pages to be used to slur the Council on Pharmacy and Chemistry of the American Medical Association, as well as the *Journal of the American Medical Association*, I think it only fair to your readers that they be informed of the facts in the case, as far as they refer to phenalgin. I, therefore, ask that you kindly publish this.

To the above the editor of the *Medical Record* replied under date of September 12th:

"It has always been the aim of the editor of the *Medical Record* to keep the editorial and advertising pages of the journal entirely distinct, and in continuing that policy I am forced regretfully to return your letter replying to an advertisement in the issue of September 2d. If there should at any time be anything in the reading pages of the *Medical Record* relating to you or the Association whose interests you guard so well, to which you might take exception, I promise you the opportunity to reply fully and freely; but I am not responsible for what appears in the advertising pages, and cannot open the correspondence department to letters in commendation or condemnation of anything appearing in that part of the journal. I regret the seeming discourtesy to you, but you surely can see to what abuses it might lead were correspondents permitted to discuss in the reading pages the statements made by advertisers.

THOMAS L. STEDMAN.

"P. S.—If you publish this letter in your own journal or elsewhere, I trust you will, in justice to the *Medical Record* and to me, publish also this letter giving my reason for refusing you the hospitality of our columns. "T. L. S."

We are very glad to know that "the editorial and advertising pages of" the *Medical Record* are "entirely distinct." Since antikamnia, ammonal, phenalgin and salacatin, in the form of sal-codeia-Bell, each occupies from a half to a page in the *Record*, some physicians were unkind enough to insinuate that this was the reason the editor totally ignored the report which exposed these preparations. Dr. Stedman's letter shows that this could not be, since the editorial and advertising departments are "entirely distinct."—*Journal A. M. A.*, September 23, 1905.

¹ *Journal A. M. A.*, June 3, 1905, p. 1791.

HERZSTEIN LECTURES IN THE UNIVERSITY OF CALIFORNIA FOR 1905.

Special Chemical Problems Related to Practical Medicine.

Synopsis furnished to the JOURNAL by the lecturer.

LECTURE I.

The Toxic Agent in Gastro-Intestinal Autointoxication.

By ALONZO ENGLEBERT TAYLOR.

Gastro-intestinal autointoxication must be separated from exogenous intoxications, especially from decomposed food. It is to be distinguished from the gastro-intestinal infections, for which we assume that they cause disease by the elaboration of specific toxic substances. That gastro-intestinal as well as the systemic infections do entrain real autointoxications by disturbing the natural progression of metabolism, cannot be disputed. Gastro-intestinal autointoxication ought to be separated from indigestion, dyspepsia, gastritis, and enteritis. For these diseases still more than for the specific infections is it certain that autointoxications may constitute a fraction of the morbid consequences.

By gastro-intestinal autointoxication we understand therefore an intoxication that arises in the course of the digestion of normal food, and independent of any exogenous intoxication, of every known exogenous infection, and of enteritis except such as may be *sui generis*. The hypothetical agent must be a substance originated within the alimentary tract. It cannot be denied that an autointoxication may result from every alimentary infection and enteritis, since the diseased tissues may do their work improperly. But in any event it would be secondary and not the primary cause of the disease.

A discussion of the hypothetical agent in gastro-intestinal autointoxication in the strict sense may be divided into five headings—Digestive Fluids and Secretions; Normal Products of Digestion; Abnormal Products of Digestion; Substances Formed Normally From Food by Bacteria Within the Alimentary Tract; and Abnormal Products of Bacterial Disintegration of normal food.

Intoxication by Resorption of the Digestive Juices. The digestive enzymes and juices have a certain toxicity independent of their salts and reaction. It is by some assumed that these substances are in normal life resorbed and rendered harmless by some process of distoxication. It was assumed that the postulated distoxication might become disturbed and an autointoxication result. For the assumption that the ferments are resorbed from the alimentary tract, there is no foundation. If the circulating ferments of the body are to be regarded as derived from the digestive glands, it is more natural to assume that they have passed into the circulation directly from the glands than to assume a secondary resorption from the lumen of the tract. Ferments are colloids and as such unadapted to absorption. The pepsin and curdling ferment are digested by the trypsin; the salivary ferments are digested by the pepsin. These ferments are furthermore, with those of the pancreas and succus entericus, exposed to putrefaction by bacteria, to which they are very sensitive. There is not a single reported experimental fact, exact observation or clinical fact that is explained by the assumption of the resorption and non-distoxication of the digestive juices.

The Products of Normal Digestion. Some of these are toxic. The albumoses and peptones produce fever, leukocytosis, alterations in the coagulability of the blood, hemolysis and cellular degenerations of mild degree. In the severe degenerative diseases, as acute yellow atrophy of the liver, acute pancreatitis and septic exudations, these proteins may be found in the blood plasma. There is no experimental work or clinical investigation tending to show that these